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Total Number of Pages in This Submission

6

Application Number

10/689,289

Filing Date

10/20/2003

First Named Inventor

James Edward Johnson

Art Unit

3746

Examiner Name

Tae Jun Kim

Attorney Docket Number

133476

ENCLOSURES (Check all that apply)☐

Fee Transmittal Form

☐

Fee Attached

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Amendment/Reply

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After Final

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Affidavits/declaration(s)

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Extension of Time Request

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Express Abandonment Request

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Information Disclosure Statement

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Incomplete Application☐Reply to Missing Parts
under 37 CFR 1.52 or 1.53☐

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☒Other Enclosure(s) (please identify
below):REPLY BRIEF OF APPELLANT
(5 pages)

Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name

Steven J. Rosen, Patent Attorney

Signature

Printed name

Steven J. Rosen

Date

October 11, 2006

Reg. No.

29,972

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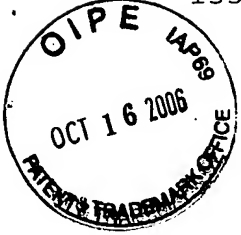
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant: James Edward Johnson)	
)	
Serial No: 10/689,289)	Group Art Unit: 3746
)	
Filed: 10/20/2003)	Examiner: Tae Jun Kim
)	
For: FLADE GAS TURBINE ENGINE)	
WITH FIXED GEOMETRY INLET)	

Commissioner for Patents
Alexandria, VA 22313-1450

REPLY BRIEF OF APPELLANT

In the Examiner's Replacement Answer mailed September 25, 2006, the Examiner raised certain new points of argument. Accordingly, this Reply Brief is being filed pursuant to 37 C.F.R. 41.41(a).

RESPONSE TO EXAMINER'S ARGUMENT

With regards to Claim Rejections under 35 U.S.C. 103(a) as set forth in the Examiner's Answer starting on page 8 under item (9) titled Grounds of the Rejection.

The Examiner stated that Johnson clearly teaches one of ordinary skill in the art that his invention can be used with both variable cycle (FLADE) engines as well as non-variable

cycle engines as found in column 4, lines 35-41 of Johnson. However, this is a mis-statement of the sentence as regards its wording, scope, and meaning. The invention in Johnson is a FLADE engine as clearly pointed out through the Johnson '713 patent as can be found in the title, the abstract, and throughout the specification. The two sentences discussing this point are as follows:

"The exemplary embodiment of the present invention is illustrated in FIG. 2 as having a variable cycle inner engine 10 in terms sufficient to understand its operation and that of the present invention. Note that may different types of variable cycle engines as well as non-variable cycle turbofan and turbojet inner engines may be used for the purpose of this invention."

Thus, the Examiner is incorrect and the entire FLADE engine disclosed in Johnson is a variable cycle engine and only a portion of the FLADE engine which is specifically identified as the inner engine 10 may be either a variable cycle engine or a non-variable cycle engine. The point is that the entire FLADE engine is a variable cycle engine whether the inner engine is a variable or non-variable cycle engine.

On page 17 of the Examiner's Answer the Examiner states "Appellant argues that the FLADE engine inlet (A1) would not be capable of being used with a fixed geometry inlet duct because the inlet duct is between the free stream flow area A0 and A1." This is not correct and again the Examiner has taken the Appellant's arguments out of context and misconstrued the words. The Appellant argues that one skilled in the art would

not be motivated to combine either of the two primary references with any combination of the secondary references. The major reason for this conclusion is that such a combination appears to eliminate the benefits of using a FLADE engine which is a more complicated and heavier engine than a non-FLADE engine as taught in the prior art. If the benefits as taught by the prior art are not available to a combination as taught by the Examiner, then no one skilled in the art would make such a combination as the Examiner has done because of the complexity and additional weight of a FLADE engine as compared to a non-FLADE engine,


On page 18 of the Examiner's Answer the Examiner states "Note that Appellant's argument that the use of a fixed geometry inlet duct will inhibit the operation of the FLADE engine can be construed as a tacit admission that Appellant's own invention will not work or at the very least have inhibited operation." This is not correct and again the Examiner has taken the Appellant's arguments out of context. These comments applied to the prior art references and what the prior art references taught. The Examiner is correct in stating that the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. The prior art teaches the use of a FLADE engine to avoid the consequences of a mismatch between free stream flow area A0 and the FLADE engine inlet area AI through which the total engine airflow passes. The mismatch is avoided by having the additional or variable pumping provided by the FLADE fan 2 and the FLADE duct 3 to avoid spillage at the

engine inlet and its attendant spillage drag and decreased ram recovery of the engine inlet. The prior art secondary references clearly show that a relationship between free stream flow area A_0 and the FLADE engine inlet area A_I as taught in the prior art by the primary references does not exist because of the intervening fixed geometry inlet duct. Thus, then one skilled in the art would not see any advantage to use a FLADE engine with a fixed geometry inlet duct because of the disadvantages of a FLADE engine as compared to a non-FLADE engine. There is no motivation found in the prior art to make the combination the Examiner has made. One skilled in the art having a technical or economic reason or both to use a fixed geometry inlet duct would not have any reason to use a FLADE engine because the prior art teaches no benefit to using the FLADE engine with a fixed geometry inlet duct. The Examiner has failed to address the issue that if the FLADE fan blades and vanes are used to control the amount of air received through FLADE engine air inlet having an area A_I , why would one skilled in the art want to add all the extra equipment, cost, weight, and complexity of such a FLADE system. The answer is of course one would not and that there is nothing in the prior art that suggests such a combination to one skilled in the art.

The Examiner has rejected Claims 1, 3-5, 7, 8, 10-12, 14-22, 41, 43-45, 47, 48, 50-52, 54, 55, 57-59, 61, 63-65, 67, 68 under 35 U.S.C. 103(a) as being unpatentable over EP 567277 in view of any of Tindell (5,447,283), Creasey et al. (2,956,759), Bullock (3,302,657), and Kerry et al.

(2,940,692). Many if not all of the secondary references including Tindell are designed for supersonic aircraft and supersonic engines. The FLADE engine disclosed in EP 567277 as indicated in the specification and FIG. 6 is not capable of supersonic flight since there is no afterburner and no such capability is mentioned in the Specification of the European Patent Application EP 567277. Thus, the Examiner's reasons for combining references seems to have no basis and one skilled in the art would not make such a combination as the Examiner has done for the purposes of the 35 U.S.C. 103(a) rejections.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Steven J. Rosen", is written over a horizontal line.

Steven J. Rosen
Attorney for Appellant
Reg. No. 29,972
(513) 489-5383

October 11, 2006